DOCUMENT RESUME

EM 005 944

ED 024 269

A Study of Teacher Behavior With and Without the Use of Programmed Books: Sego Lily Elementary School, Lehi, Utah

Spons Agency-Rocky Mountain Educational Lab. Corp., Denver.
Note-14p.
EDRS Price MF-$0.25 HC-$0.80
Descriptors-*Basic Reading, Beginning Reading, *Conventional Instruction, Course Evaluation, Individualized Reading, Primary Grades, *Programed Instruction, Programed Texts, Reading Achievement, Reading Programs, *Teacher Attitudes, *Teacher Behavior

Effects of the introduction of programed readers on teacher behavior and attitudes and on student achievement were considered at the early primary school level. The Webster-McGraw-Hill series of programed readers was included in the curriculum of an experimental group of first through third grade classes while a comparable control group used a standard Scott Foresman series. Teachers recorded activities in nine categories during five typical days. The increased time spent with individual students and more definitive knowledge of their abilities was considered the most beneficial effect of programed readers. Time required for planning and conferences was decreased, but no significant increase in amount of "innovative enrichment" experiences was noted. All teachers in the experimental group expressed a strong preference for the programed readers. They were also concerned with the transfer value in other subjects of the required sequential and hierarchical teaching in reading. (SS)

EDO 24263

A STUDY OF TEACHER BEHAVIOR WITH AND WITHOUT THE USE OF PROGRAMMED BOOKS

Sego Lily Elementary School
Lehi, Utah

MENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

A STUDY OF TEACHER BEHAVIOR WITH AND WITHOUT THE USE OF PROGRAMMED BOOKS

Sego Lily Elementary School
Lehi, Utah

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

PROGRAM: INDIVIDUALIZING INSTRUCTION

Program Director:
Dr. Glen F. Ovard
Bringham Young University
210 College Hall
Provo, Utah 84601

With Centers At:

Brigham Young University:
Karl E. Starr

Loretto Heights College:
Sister Philomene Schiller

Weber State College:
Dr. Blaine P. Parkinson

Published by
Rocky Mountain Educational Laboratory
Program on Individualizing Instruction

ROCKY MOUNTAIN EDUCATIONAL LABORATORY
306 Redding Miller Building,
105 Fillmore Street.
Denver, Colorado

and

1130 University Club Building,
136 East South Temple,
Salt Lake City, Utah.

Director: Dr. James M. Thrasher

EM 006 944

TABLE OF CONTENTS

Purpose	1
Hypothesis	1
Procedures	2
Measurement	2
Findings	4
Teacher Evaluations	6
Transfer Value	8
Student Progress	9
Summary	11

A STUDY OF TEACHER BEHAVIOR WITH AND WITHOUT THE USE OF PROGRAMED BOOKS

Purpose

The major purpose of the study was the impact of the use of programmed readers on teacher behavior. A secondary concern was to determine values, if any, to children when such books were used and to determine teacher attitudes toward the use of such books. This study included both experimental teachers (those who used programmed books) and control teachers (those who used regular basal books).

Hypothesis

The hypotheses for the study of teacher behavior were as follows:

"The teachers who use programmed books as an instrument of aiding the educational process of children in grades one, two and three will:

A. Develop a greater concept of the individual needs of children.

B. Teach more on a one-to-one (teacher-to-pupil) basis in meeting the personal needs of each child at the time such needs exist.

C. Become more creative and resourceful in his teaching.

D. Have added time to teach other subjects in addition to reading, and thereby enlarge and enrich the curriculum for all children.

E. Learn added methods of teaching as a result of pursuing research and study.

F. Find increased satisfaction from using programmed books resulting from added pupil success."

Procedures

The method of Procedure was as follows:

Teachers working in the experimental units used the series of readers published by Webster-McGraw-Hill in selected first, second and third grade classes. Teachers instructing in the control units followed the complete basic reading program as published by the Scott, Foresman and Company. The number of teachers functioning in the control groups were matched with a comparable number of teachers functioning as the experimental groups. Evaluative criteria were developed that could be used as a standard of measurement in testing each particular hypothesis. The study shifted the focal point of research from the pupil to the teacher.

Measurement

1. Teachers recorded for five typical days the number and kind of innovative and creative experiences that add stimulus and enrichment to the reading program.
2. Teachers recorded the amount of time devoted daily for five typical days to planning and preparing to teach in subjects other than reading.

3. Teachers recorded daily for five typical days the amount of time devoted to teacher-pupil planning of the day's lesson.

4. Teachers recorded the frequency within a typical five-day period during which they made a record of each pupil's accomplishments in reading.

5. Teachers recorded the amount of time spent during one typical week in interacting with co-workers concerning reading instruction.

6. Teachers recorded the amount of time within a typical five-day week devoted to analyzing their teaching results and in planning for continuity of pupil learning.

7. Teachers listed the advantages and/or the disadvantages observed from using their particular books in giving individualized reading instruction.

8. Teachers recorded the amount of time devoted daily for a typical five-day period to helping individual children in reading.

9. Teachers recorded the amount of time spent daily over a typical five-day period in sub-group instruction during which vocabulary and interpretive reading skills are stressed.

It was hypothesized that the programmed books substantially would serve in saving time of teachers devoted to teaching reading.

Findings

The nine standards of measure were essentially concerned with the "time variable"to determine the difference in behavior patterns of teachers who did and those who did not use programmed books. No essential differences were noticeable between the experimental teachers (those who used programmed books) and the control teachers (those who used non-programmed books) in the "innovative and creative" experiences provided as "enrichment to the reading program." Actually the lists recorded by the experimental teachers varied more in number within this group than between the two groups (i.e. the experimental vs. the control teachers). It may well be noted that in both cases the lists appear to be reasonably long and productive to good learning situations.

Items No. 2 and No. 3 were concerned with "the amount of time devoted daily" for "five typical days to planning and preparing to teach" and "to teacher-pupil planning of the day's reading lesson". Teachers using programmed books devoted much less time to such planning than did teachers using non-programmed books. Teachers using programmed books repeatedly and extensively stated one of the advantages of the programmed books was this time saving characteristic. This, they declared, was because the planning essentially had all been done and was completed by following instructions in the teacher manual, and thereby freed the teacher for other opportunities.

Item No. 4 was concerned with the "frequency with which the

teacher makes a record of each pupil's accomplishments in reading." This frequency substantially varied between the experimental and the control groups and likewise varied to a lesser degree among the two groups of teachers. Inasmuch as the experimental group was working on a program specifically prepared for individualized learning and was following instructions with the manual, these teachers spent considerable more time in "record" keeping of individual pupil progress than did the "control" teachers.

Item No. 5 is concerned with the amount of time during a typical week spent "interacting with co-workers concerning reading instruction". Those working with programmed books did less planning and less "interacting" with the fellow teachers because of the very nature of the carefully planned programmed books they were using.

Item No. 6 is very much like other criteria wherein teacher planning was involved. Repeatedly throughout the year in conferences and in their written analysis at year's end teachers using programmed books emphasized that one of the distinct advantages of these particular programmed books was the freedom from detail planning and preparation due to the fact that the planning was completed for the teacher. "More time for other things that are needed" was the universal voice of those who used these programmed readers.

Teacher Evaluations

Teachers using programmed books made long lists of "advantages in giving individualized reading instruction."

These teachers have analyzed these so well that some items should be included herein:

1. Every child works at his own speed and is not frustrated.

2. Because of the sequential building of the basic skills, a child meets success every day and gains self-confidence whether he is a fast learner or a slow one.

3. Excellent study habits are the results of this program.

4. The books are cleverly illustrated and the children are anxious to read them.

5. Teachers are able to give more individual help when needed.

6. Because of the careful record keeping, the teacher is aware of each child's daily progress.

7. The teacher has a better knowledge of the child's strength and weaknesses.

8. The child can read more independently and as a result reads many supplementary books.

9. Children learn to decode more easily unknown words.

10. Good listening habits come as a result of this program.

11. The child not only learns to read a word, but also learns to spell it correctly because of the linguistic approach.

12. Grammar and punctuation are taught and carefully checked on.

13. If a child is absent, no problem is presented because he works at his own pace.

The following are the major disadvantages that were listed:

A lazy child does not make progress as he would if he were working in a group.

It causes some cheating.

There are too many children for the teacher to work with only one child at a time.

Most of the teachers using programmed books and the control teachers had had ten or more years of teaching experience and all were regarded as master teachers The question "If you have had the opportunity to teach in both programmed and non-programmed readers, which books would you prefer for your basic reading program? and why?" was asked.

All teachers using programmed books, with considerable emphasis, expressed a preference for these books. Some made brief statements denoting the reason for their choice, and others wrote more elaborately. The following are some quotations. "I like the logical presentation for continuous learning." Another teacher said, "programmed books give children an excellent foundation in reading. It almost insures that each child gets consistent sequential instruction in basic reading

skills and their application. It increases the time a child is learning to read during the reading period. It adds to the responsibility of the child in building his own independence."

Another teacher said, "The teacher material is better organized and more understandable. It provides for complete individual learning. It possesses the combination of sight words and phonetic words and saves teacher time, thereby avoids busy work without purpose by both teacher and pupil."

"I just don't feel so confused, rushed, and out of contact with the class. I can truthfully say I know where each (child) is and what he can do."

Transfer Value

One segment of the study was concerned with the possibility of an analysis of "teacher behavior" in terms of transfer to other subject areas while using programmed readers. That is, it had been the assumption that a teacher using programmed instruction follows "distinctive" patterns of teaching. Among these patterns are permitting the child to begin the learning process from material that is readily understandable to him and proceeding to increasingly complex materials that are to be mastered; assuming that the learner is nearly always correct in his answers; and assuming that he accepts this immediate "feed-back" thereby adding to the stimulus that motivates him to pursue his learning in the subject he is understanding.

The teachers were anxious to learn if there was a transfer of these "techniques" or methods of procedures to other subjects.

Several of the teachers using the programmed books have indicated they believed as they learned the value of the programmed instruction there was developing for them new "insights" into the possibility of greater use in other subjects. Some such expressions as the following were made: "I would like to try programmed materials in spelling and in arithmetic." Another teacher stated, "I would like to try it more in math to give the faster children a broader base of understanding with expansion of concepts and to give the slower ones the constant stimulus-response reward."

Another phase of possible "transfer" to other subjects was implied in the question, "Has the use of programmed books in reading given you added incentive to more nearly personalize and individualize in other areas of the curriculum?"

One teacher said "Yes we've used it in mathematics and creative writing."

Student Progress

Part of the Sego Lily study included giving some tests at or near the end of the school year. The Stanford Achievement Test Primary Battery was given to 161 children in grade one who had been in the programmed reading groups (experimental) and 98 children were given the same test who were in classes where programmed books were not used.

The average scores of the pupils using programmed books were

substantially higher in each category than the scores of the children using other books for basal instruction.

Following are the comparison in average scores in each such catagory of both groups:

(Scores are given as grade equivalents)

	Word Meaning	Paragraph Meaning	Vocabulary	Spelling	Word Attack Skills
Programmed	2.38	2.07	2.53	1.26	3.65
Controlled	1.69	1.45	1.74	.79	3.08
Difference	.7	.6	.79	.47	.57

In the conferences held with teachers using programmed books and in their written analysis, these teachers have stated their pupils learn much more than reading. The teachers claim the children learn to spell and they get increased meaning from what they do read.

An analysis of the scores in each of the subdivisions of the Stanford test shows a slightly wider spread of achievement by the students who were using basal testbooks, and a skewed curve toward the acceleration of the upper scores of students in the programmed reading. From these data and with a modest degree of skepticism it may be concluded that students using programmed books profited more from their learning situations than did the control students. Likewise, retarded students achieved more in their learnings than did the slower control students, thereby limiting the spread and adding more scores to the upper attainments.

Summary

Teachers using programmed books express strong preferences for such books and hope to continue to use them.

The greatest universal value, as expressed by these teachers, was the individualized method of instruction provided. With the benefits of the programmed books these teachers claim to know the successes and/or handicaps of each child.

Apparently, the achievement of pupils using programmed books is greater in reading and related areas of learning than comparable pupils using standard basal readers.